

Factors contributing to Tuberculosis cure rate: The views of professional nurses in the primary health care facilities within the Greater Giyani Municipalities of Limpopo Province

Maswanganyi Nandzumuni Velaphi¹, Rachel Tsakani Lebese², Ntsieni Stella Mashau³

¹Department of Health and Social Welfare, Limpopo Province, South Africa

²Department of Advanced Nursing science, University of Venda Limpopo, Province, South Africa, P.O Box 3198, Giyani

³Department of Public Health, University of Venda, Limpopo Province, South Africa Private Bag X5050, Thohoyandou0950

rachel.lebese@univen.ac.za

Abstract: The study took place in Mopani district which is one of the districts with TB cure rate of below 85%. The cure rate for the facilities ranges from as low as 14% to 94%. According to the National TB Strategic plan the target for TB cure rate is 85%. The purpose of the study was to explore and describe the views of primary health care nurses in relation to factors contributing to low TB cure rates in primary health care facilities of greater Giyani Municipality in Mopani District of Limpopo Province. The research design in this study was qualitative, exploratory, descriptive, and contextual in nature. In this study the population consisted of professional nurses working in Primary health care facilities which have a cure rate of below the national target of 85%. Non probability purposive sampling was used to select the facilities with low TB cure rates. One professional nurse working with TB patients was sampled from each selected facility to make a total of 18. Interview guide was used to collect data. Tech's open coding method of data analysis was used to analyse data in this study. The findings showed that the TB patients have cultural beliefs about TB which result in TB patients seeking assistance from traditional health practitioners and faith based healers first. It was also noted that there is poor referral system of TB patients from the hospital to the primary health care facilities which result in the lost to follow up.

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1. Introduction

Tuberculosis (TB) remains a worldwide healthcare problem although it can be cured within 6 to 8 months of taking anti-tuberculosis treatment. The most unresolved challenge in the management of TB is the treatment completion, which manifests itself in high death rates and the occurrence of drug resistant TB (WHO, 2010). In 2009, the cure rate of TB was at 78% globally and the rate of treatment success was only reached by three regions, namely, the Eastern Mediterranean at 85%; the Western Pacific at 92%; and the South East Asian at 87% (WHO, 2009). In the African and American regions the treatment success rate was 75% and 76% respectively. South Africa managed to reach 73% treatment success rate, which is far below that of the global average treatment success rate of 85% (WHO, 2009).

In order to improve the cure rate globally, the Stop TB strategy was adopted in 2006. The Stop TB interventions are divided into six broad components:

- pursuing high quality Directly Observed Treatment Short course (DOTS);
- expansion and enhancement, addressing TB/HIV, Multi Drug Resistant TB (MDR-TB) and

- the needs of poor and vulnerable populations,
- contributing to the health system strengthening based on primary health care,
- engaging all care providers,
- Empowering people with TB and communities through partnership and promoting research.

The global plan to stop TB also indicates how and at what scale the strategy should be implemented (WHO, 2009).

The strategy also outlines the major interventions that should be implemented to achieve one of the Millennium Development Goals (MDGs) that is goal number six. The goal states that countries should begin to reverse the incidence of TB by 2015 and to reduce by 50% relative to 1990 levels the prevalence and mortality rates (Dye, Scheele, Dolin, Phatania & Raviglione, 2006). Other targets are to achieve a case detection rate of new smear positive cases of at least 70% and to reach a treatment success rate of 85% (Dye et al., 2006).

The Stop TB Strategy implementation rate is not yet at 100%; only 18 countries are implementing the strategy. Progress against tuberculosis has been made

countrywide between 1995 and 2005 as a result of the implementation of DOTS and Stop TB Strategy. It was reported that among patients that were notified of tuberculosis in 2008 85 % were successfully treated exceeding the 85% target of successfully treated new smear positive cases (WHO 2011). Globally DOTS coverage had reached 94% in 2007, which does not correlate with the cure rate of less than 70%. All regions have adopted the DOTS strategy, but they differ in the coverage as follows: African region 93%; American region 91% Mediterranean region 97%; European region 75%; South -East Asia 100%; and Western Pacific region 100 % (WHO, 2009).

2. Problem statement

The implementation of DOTS in South Africa was 100% (WHO 2009). In Limpopo Province DOTS coverage ranges between 75% and 80%. DOTS coverage in Mopani district was 94%. According to the report from the District Health Information System (DHIS, 2007) Greater Giyani Municipality DOTS coverage ranges between 90% and 96 % .There was thus a high DOTS coverage in Greater Giyani Municipality. However, this did not correspond with the TB cure rate, which was less than the national target of 85%.

In many developing countries such as South Africa, less than half of the TB patients who started treatment were cured or had completed the treatment course (WHO, 2009:). In 2008 Limpopo Province had a TB cure rate of 65 % and a defaulter rate of 7%. In Mopani district the TB cure rate is at 68.4% and in Greater Giyani Municipality the TB cure rate for 2008 was 70, 2%. This cure rate was still far below the national target of 85% (DHIS, 2008).

3. Purpose of the study

The purpose of the study was to explore and describe factors contributing to low Tuberculosis cure rate as viewed by professional nurses in the primary health care facilities within the Greater Giyani Municipalities of Limpopo Province

4. Materials and methods

Factors contributing to low TB cure rate were explored and described by the researcher. The researcher later documented lived experiences as narrated by the participants. The researcher chose descriptive research because it summarized the findings concerning the problem investigated. (Burns & Grove 2005; Creswell, 2003; Polit & Beck, 2004). The population was made up of all professional nurses who were taking care of TB patients in facilities with low TB cure rate in Greater Giyani Municipality. Facilities were sampled based on the low percentage

of TB cure rate. Professional nurses were selected purposely because of their knowledge of working with TB patients (Polit & Beck, 2004). The data gathering method of choice was an individual face to face interview which has been done through the use of an interview guide (Creswell, 2009). The researcher asked participants questions to stimulate their thoughts. Probing and follow-up questions were asked as a follow-up to the participants' response. The following questions were included in the interview guide: Can you describe to me how discharged patients on TB treatment are managed in your area? In your own view what factors could be contributing to low TB cure rates? Can you describe to me the strategies that you think can assist in improving the cure rates? Duration of the individual interview dependent upon the way the participant responded to probing questions. The researcher used qualitative data analysis methods to analyze data. Tech's open coding method of data analysis was used to guide the researcher in this study (De Vos, 2003). All data has been read carefully, with understanding, to obtain a sense of the whole. Ideas have been written down as they come to mind. The researcher selected one case and asked what this is about and thinks about the underlying meaning in the information. The researcher's thoughts were then written in the margin. A list was made of all themes and similar themes clustered together. The researcher applied the list of themes to the data. The themes abbreviated as codes were then written next to the appropriate segments of the transcripts. Themes and sub-themes were developed (De Vos, 2003). Trustworthiness was used to clarify the notion of objectivity as it is manifested in qualitative research (Guba & Lincoln, 1985). Four principles were applied to ensure trustworthiness. These strategies are credibility, dependability, conformability and transferability (Brink, 2006). Activities to ensure credibility included member checking, prolonged engagement, reflexivity and peer review. Transferability was obtained by using purposeful sampling method, working contextually and dense description. Ethical measures were ensured as permission was sought from the University of Venda Ethics Committee, Department of Health Limpopo Province. Permission was sought from informants after obtaining informed consent from them. Use of audiotape and research assistants was explained to the informants.

5. Results and Discussion

The participants were 18 professional nurses and all were females. Their age ranged between 31 and 48. All the professional nurses were having more than two years experience of working with TB patients.

Table 2. Professional nurses: themes and sub-themes

Theme	Sub-theme
5.1 Poor management of TB patients on discharge from the hospital	<ul style="list-style-type: none"> • Poor referral system • Lack of knowledge about TB disease and its treatment
5.2 The impact of stigma in the management of TB patients	<ul style="list-style-type: none"> • The use of facilities far from the patients' homes • Cultural beliefs about TB

Theme 5.1. Poor management of TB patients on discharge from the hospital

Nurses described how TB patients are managed on discharge from the hospital. Data reflected that there is poor management of TB patients which contributes to low TB cure rates. The following factors were identified from the theme: Poor referral system, lack of knowledge about TB disease and its treatment.

• Poor referral system

During interviews professional nurses mentioned different factors that affect the management of TB patients. Poor referral system between the hospital and the primary health care was identified as the first factor that affects the management of TB patients. The following were said to be the ways in which poor referral system manifests itself: Lack of accompaniment of discharged patients from the hospital to the primary health facilities and lack of follow up by the referring hospital.

Participants described the referral system as being poor because patients are given referral forms from the hospital without and told to go to the primary health facility with that referral form without proper explanation of its importance. It was also revealed that the hospitals are failing to inform the primary health care facilities about the discharged TB patients. This often results in patients not reaching the facilities where they are referred to. Participants also indicated that TB patients who are discharged from the hospitals are lost because sometimes they consult traditional or faith healers who give them alternative treatment.

Professional nurses also indicated that patients default treatment because they are not accompanied by health care professionals or relatives from the hospital to the primary health care facility to make sure that they reach the place where they are referred to. It was also said that there is also lack of follow up by the referring facility until the patients are found by chance during the outreach activities or feedback on performance which is done by the TB coordinator. This made them to identify that the referral system is poor.

One participant said *"We only become aware that there is a patient who was supposed to come to our facility after two to three months when the local TB coordinator has given us print out of the report of the patients transferred from the hospital to the*

primary health care facilities and by that time the patient has already defaulted from treatment".

Another participant said "We get some patients after a year when one of the family members have contracted TB disease and come for consultation at the facility, when we ask them if there are family members who had the same signs and symptoms is then that you realize that there is a person who did not complete treatment because the person did not reach the facility or has taken treatment for one month or two".

Another participant said "Most of our TB patients are found at home during door to door campaigns having their pink referral forms from the hospital without any TB treatment anymore".

Another participant said: "Some of the TB patients go to private practitioners for their HIV condition. When they are diagnosed with TB and have to be referred to primary health facilities they don't go there until they are very sick because they will be taking the Anti Retroviral Treatment only".

Literature indicates that poor referral of TB patients from Chris Hani Baragwaneth hospital to primary health care facilities resulted in poor TB outcomes which included low TB cure rates due to patients who are lost for treatment. An intervention was undertaken between 2003 and 2005 to improve the referral system to be successful. The evaluation of that intervention showed that 94% of patients were successfully referred to primary health care facilities which in turn improved the TB cure rates (Edington & Hodkinson, 2006). It is said that patients are also lost between the public and private health care institutions and programmes of TB and HIV due to poor collaboration (Wandwalo, Kapalata, Tarimo, Corrigan & Morkve, 2004). Discharged patients were instructed to go to a TB office located near the front gate of the hospital for completion of discharge procedures, those who by pass the TB office not being registered were missed and at the end they default from taking treatment (Dong, Thabethe, Hurtado, Sibaya, Dlwati, Sibaya and Wilson, 2012).

From what was described it is clear that poor referral system can affect the TB cure rate where there is poor follow up of the referred TB patients. It is also noted that there is no communication between the hospital and the Primary Health Care (PHC) due to

failure of the hospital to inform the PHC facilities about the discharged TB patients.

- **Lack of knowledge about TB disease**

During interviews professional nurses said that lack of knowledge of TB disease resulted in many factors which reflect poor management of TB patients. Data reflected that lack of knowledge by the TB patients was said to be the core in the mismanagement of TB patients.

Data revealed that there is lack of information among TB patients and the community at large. Participants are not aware of the dangers of not completing TB treatment which resulted in movement of patients from one place to the other without notifying the health care professionals. According to Health Belief Model (HBM) it was said that people will not change their behaviour unless they believe that they are at risk. In this study it is clear that there is lack of knowledge on TB and complications associated with TB and its complications. The participants explained how the TB patients move from one farm to the other without continuing with TB treatment anymore. Professional nurses indicated that TB patients move from one farm to the other when they feel better after two months. It was said that when feeling better some of the patients run away from their homes and visit relatives without letting the nurses know about their whereabouts.

Most of the patients who are infected with TB delay in seeking medical assistance and they sometimes die because they come to the health facility when they are seriously ill. The Health Belief Model revealed that the change of behaviour to avoid the consequences of the disease depends on how serious people can consider the consequences. In this study it is indicated that TB patients don't take the consequences of the TB disease seriously which led to complications and death. They also indicated that the delay is caused by the lack of knowledge about the signs and symptoms of TB. They also said that TB patients default treatment when they felt better because they thought that they are cured.

One participant said: *"TB patients go to farms without letting us know about their movement, we only get the report when we visit their families that they are working on the farms and the challenge is that they don't stay in one farm, they move from one farm to the other and is difficult to trace. This movement affect their management and collection of treatment from the primary health care facility"*.

One participant said *"I once been involved in the tracing of TB patients at the farms and it was a painful experience for me because it took us the whole day to get the patient because we were referred from one farm to another because patients are not stable, other patients are found after two months which means that*

they are defaulters of treatment and others come back to the facilities when they are seriously ill. This affects their treatment adherence because when we discover that the patient is not coming back for follow up is when the period of the treatment given has elapsed".

Another participant said: *"We experience defaulters after the second month of treatment and when they are traced and put back on treatment they say that the reason for them not to take treatment anymore is because they felt better and think that they are cured"*.

Another participant said: *"TB patients visit the health care facilities when they are very sick and some die because of late reporting to the primary health facility. Reporting late to the primary health facilities is influenced by the thought that the disease is a result of witchcraft. They report to have visited the traditional health practitioners and told that they are having makhuma or xidyiso from which they were given traditional medicine to use as a cure for the disease"*.

Another participant said: *"Patients who report late to the health facility are saying that they didn't know that what they were experiencing might be the signs and symptoms of TB. They report to have used the over the counter medication to relieve their cough for a long time"*.

One participant said *"Some of the TB patients tell us that they interrupted treatment after taking it for two months because they were not feeling sick anymore and thinking that the nurses always want to have people in the facilities so that they can get paid at the end of the month"*.

Literature indicates that the delay in diagnosis and initiation to treatment contributes to low TB cure rates of below the national target of 85% (Kiwuwa et al. 2005). It was also found that smokers delay in seeking medical assistance because they associate coughing with their smoking and not with TB symptoms (Kiwuwa et al. 2005). It was also revealed that alcoholics and subsistence farmers also delayed visiting health facilities due to lack of knowledge about signs and symptoms (Mpungu et al., 2005). In Health Belief Model a person is willing to change the behaviour if it is understood that there are negative consequences if the behaviour is not changed efforts can be made to change the behaviour. In this situation people do not differentiate between signs and symptoms of TB and the coughing from smoking and they don't make any effort to seek for medical assistance.

Lack of an opportunity to express feelings by the TB patients is said to have contributed to defaulting among TB patients. However Elbireer, Guwabudde , Mudiope , Sekandi and Manabe (2011) revealed that lack of relationships with patients affects adherence

because patients don't have trust to the nurses and they will not comply even to the instructions given to them because they don't even trust that the treatment is the correct one and will be able to cure their disease (Elbireer et al, 2011). The HBM indicate that people are not easily convinced about change of behaviour unless they know that they will benefit something good as a result of that change.

Another study revealed that there was no proper giving of information between patients and health care providers on diagnosis, registration and during continuity of treatment. The same study indicated that patients were not given enough information about TB and this resulted in patients defaulting from taking treatment (Thiam, Lefevre, Hane, Ndiaye, Ba, Fielding, Ndir and Lienhardt, 2007:383).

It was also revealed that most of the TB patients who are also HIV positive die because they seek medical assistance late when they are very sick. Ghadhi, Moll, Sturm, Pawinsky, Govender, Laloo, Zeller, Andrews and Friedland (2005) revealed that the presence of other diseases like HIV/AIDS and Multidrug Resistant TB (MDRTB) affect cure rates negatively. It was found that the presence of other diseases like HIV and AIDS affect the cure rates because most of the patients die.

A study conducted in two districts of Punjab province by Muhammad, Shaid, Muhammad, Soleed, Omer, Mushtaq, Siddiqui and Kram (2011) revealed that there inequality in the knowledge of TB between urban and rural residents in that province. It was revealed that there is poor knowledge of TB signs and symptoms, transmission, prevention and treatment of TB in people from the rural areas of the province. The study revealed that people were using traditional medicine and going to the priests to receive prayers in order to get cured. It was also mentioned that the treatment period was described to vary from 3 months to six months to those who were using government health institutions (Muhammad et al, 2011).

A study conducted by Shiluvane, Risenga, Khoza and Lebese (2011) in Vhembe district of Limpopo province in South Africa also revealed that people have misconceptions about TB symptoms, transmission, causes and the risk factors for the disease. It was revealed that these misconceptions resulted in neighbours and the families of TB patients not sharing anything with them because of fear of contracting the TB disease.

Mabunda and Bradley (2011) in their study conducted in Mopani district which is also a study area of this research revealed that lack of information about TB and its treatment had a negative impact on the management of TB patients. TB patients who experienced side effects dropped out of treatment after two months of effective treatment and lied about being

discharged. It was also revealed that TB patients who claim to be adhering to treatment were throwing away some of the treatment thinking that they are lessening the side effects within their bodies.

From what was described it was noted that TB patients lack the necessary information about their condition which resulted in lack of adherence to treatment. This might mean that the primary health care nurses must strengthen giving individual health talks and do outreach activities in order to disseminate information to the communities.

Theme 5.2 The impact of stigma in the management of TB patients

Professional nurses described the impact of stigma on the management of TB patients. It was indicated in the HBM that people are reluctant to change their behaviour because of the fear of having difficulties during that process of change. In this study stigma can prevent the patient from taking TB treatment because it is difficult to visit the facility for assistance when you know that the disease has stigma attached to it. In this study the stigma attached to TB disease act as a barrier to seek medical assistance and adhering to TB treatment. Professional nurses identified factors which showed that TB patients are affected by the stigma attached to the TB condition. The following are the sub-themes identified from the theme: The use of facilities far from the patients' homes and Cultural beliefs about TB disease.

During interviews professional nurses it was revealed that the stigma on TB disease has an impact in the management of TB disease. The use of facilities far from the TB patients' homes was identified as the main factor which affects the management of the TB patients. TB patients were said to choose to use the facilities that are far from their homes and this affect supervision of treatment. Professional nurses said that they are unable to attach patients to the treatment supporters and the patient takes responsibility for taking treatment alone. Professional nurses also indicated that it is very difficult for them to make follow ups on those patients because they sometimes switch off their cell phones.

Another factor that was said to be a problem was that TB patients were said not to be known from where they are staying because of fear of isolation by family members and neighbours. Data also revealed that TB patients who are working don't disclose their TB status to the supervisors because of fear of expulsion from work. This has a negative impact on the management of TB patients because the patient will take treatment without supervision, like the disease which will be secret and this can affect treatment adherence.

It was also revealed that when patients come from far professional nurses have difficulties in

attaching TB patients to DOT supporters because some of the facilities don't have. It was noted that in some of the villages people don't want to become DOT supporters because not all are receiving stipend.

One participant said: *"We have difficulty in the management of patients who are coming from the villages far from our facility because we don't know the treatment supporters in their villages. We just give the person treatment for self supervision and tell them how to take the tablets on daily basis. Sometimes we try to ask them to bring a person that they feel can support them with medicine administration but they normally don't bring them"*.

Another participant said: *"We are having difficulty in making follow ups to patients who are coming from far when they don't turn up for treatment. It is very much difficult for us because we rely only on the patient and when the patient don't come you don't know whom to contact, sometimes the cell phone numbers provided to us are not correct or when you try to contact the patient telephonically the phone is off"*.

Another participant said: *"During registration we advise the TB patients to use the facilities which are near to their homes for easy access but the patients usually say that they don't want the people to know that we are suffering from TB as they will isolate them"*.

One participant said: *"One of our TB patients was fired from work, then we reported the issue to the TB coordinator and then the employer was visited and given health talk about TB, then the patient got back the job and requested that other workers be tested for TB"*.

Another participant said: *"We experience problems related to stigma when managing TB patients. There is a problem that if the patient is having TB people take it for granted that the patient is also HIV positive and this is the reason why they don't want their TB status to be known by other people or even the family members"*

Another participant said: *"We experience problems in attaching patients to the DOT supporters because there are no volunteers in some of the villages because of lack of stipend"*

Literature indicates that people who were diagnosed as having TB were afraid of being known in the community because they were afraid of being stigmatized. Those who were working were afraid of losing their jobs when it is discovered by their employers that they have TB. It was also said that TB patients don't want even their families to know about their TB status, especially women because they were afraid that their husbands would divorce them as they fear that their children will be infected.

In HBM people will change their behaviour only if they see that they will benefit something good. In this situation where the disclosure of the disease will bring negative effects on the patients' relationship then there will be no treatment supporter and non adherence will be a result. (Tang and Squire, 2005: 99). It was further reported that the families also isolate the TB patients because they are also afraid of societal isolation (Kelly, 2010). It was said that TB is viewed as a bad and dirty disease by the community and the patient is isolated by the family and the community. All these difficulties result in fear of being known as having TB and it affects treatment adherence (Juniarti & Evans, 2011).

In a study conducted in Vhembe District by Sukumani, Lebese, Khoza and Risenga (2011) it was revealed that TB patients experience a feeling of social isolation due to stigma attached to the relationship between TB and HIV. It was also revealed that neighbours and relatives don't want to visit the families of those patients anymore because they fear of contracting HIV. Shiluvane, Risenga, Khoza and Lebese (2011) in their study revealed that people who contracted TB were thought to be dirty people, ate bad food and were looked down upon others as ordinary people and they were stigmatized because of that. The findings of this study indicated that TB patients don't want to be known of their TB status due to fear of stigma about TB disease. It was also discovered that the stigma can also affect the patients' lives when they are going to lose their jobs. This might mean that the nurses should strengthen their communication skills by giving health talks and doing outreach activities so that everyone in the community and workplaces is aware how TB is spread and that TB is curable. All families with TB patients to be visited and given health talk about TB so that they understand the TB issues to prevent loss of jobs to TB patients is also important that the employers be visited if there is a TB patient for health education about TB.

- **Cultural beliefs about TB disease**

During interviews with professional nurses it was revealed that TB patients are still having cultural beliefs about TB. They described visit to traditional health practitioners and faith healers as the common practice among TB patients. Data indicate that cultural beliefs about TB disease strengthen the issue of stigma which contributes to non adherence and for the complications of TB disease. Participants said TB patients take TB treatment together with traditional medicine and the patients are not getting cured. Participants have noted that TB patients develop drug resistance and others die due to failure to adhere to treatment. They also said the reason why they prefer using the traditional medicine is because the patients associate the disease with witchcraft.

It was revealed that other TB patients believed God faith healers and that God will decide on their lives as what comes next. This will affect the TB patients to take treatment because they have faith only to God and they don't have trust to TB treatment that it will cure them. Nothing encourages them to take treatment. In HBM it was said that the faith that a person has in the ability to do something has an impact on the actual ability to do it. In this situation it is clear that the TB patients don't have any faith on TB treatment and nothing positive can be done to be able to take treatment.

One participant said: *"TB patients get wrong messages from the traditional health practitioners and faith healers who make them believe that they are not suffering from TB but it is a result of witchcraft; others believe that it is a result of sleeping with a woman whose husband had passed on before the ritual ceremony is performed. TB patients also believe that the treatment from the health facilities will not be able to cure that type of TB."*

One participant said: *"Some of the TB patients are mixing the traditional medicine and the TB drugs and those patients result in treatment failures, others developed drug resistance and others their conditions worsened and died"*.

Literature indicates that traditional health practitioners are powerful allies in TB and HIV programme and the separation make patients believe that they should choose between western health treatment and traditional cultural practices. It was reported that TB patients have trust in traditional health practitioners therefore western health care system should work together with traditional health practitioners in order to win the TB patients. (Dong et al, 2012:493). It was revealed that in Somalia the beliefs concerning TB infection are ranging from punishment for dishonest, heredity, witchcraft, overwork and loss of faith. It is also believed that the treatment of that TB is with God because He is the one who created them, he knows what they will undergo through their lives until death and there is no way that it can be changed by doctors or anybody (Citrin, 2006:2000).

Hoa, Kihorson, Long and Diwar(2003) in Vietnam revealed that patients' beliefs have a negative impact on cure rate. In the same study it was found that patients believed that TB was caused by hard work, inherited and too much thinking. The results of the same study also revealed that TB patients believe that there is an alternative treatment to cure the TB disease depending on what caused the TB than using treatment from health institutions. TB patients visited traditional health practitioners and faith healers because they didn't have knowledge that the treatment provided from the health facilities was the only cure

for TB disease (Van Der Werf, Dade & Van Der Mark, 2009). Fochsen et al (2009:164) also indicated that this does not only delay the patient from getting cured, but it also worsened the patient's condition because patients develop drug resistance and others die.

It was also revealed that there are different types of TB which is the African and the western type. The first one is caused by having sex with someone who had spontaneous abortion and is treated by traditional health practitioners, the second one is caused by spread from TB sufferers as a result of smoking and environmental pollution and is treated by TB drugs (Ilongo, 2003: 81).

From what was described it was noted that cultural beliefs have influence on the stigma about TB disease. The cultural beliefs also influenced the management of TB patients where it showed that it had a negative impact. This might mean that health department should work together with faith healers and traditional health practitioners in giving the correct messages about TB disease and its treatment.

Recommendations

It was recommended that TB patients be counselled on diagnosis so that they understand their condition and comply with treatment. Involvement of community stakeholders is also recommended in the management of TB to remove stigma of TB in the community. Policy development about the referral of TB patients to be done in order to improve the poor referral system.

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Corresponding Author

Rachel Tsakani Lebeso – Doctor Curatoris
Limpopo Province, South Africa
Department of Advanced Nursing science
University of Venda
P.O Box 3198
Giyani
+20159628393/+27715618263
Email: rachel.lebeso@univen.ac.za

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